

AMENDMENTS TO THE DRAWINGS

A "Replacement Sheet" of drawings is submitted with this response showing Fig. 1 labeled "PRIOR ART". This amended is submitted as overcoming the objection raised at the top of page 2 of the instant Office Action.

REMARKS

Reconsideration and allowance in view of the foregoing amendments and the following remarks is respectfully requested.

Drawings

As noted above, a "Replacement Sheet" of drawings is submitted with this response showing Fig. 1 labeled "PRIOR ART". This amended is submitted as overcoming the objection raised on page 2 of the instant Office Action.

Specification

In this response, claims 34 and 47 have been amended in a manner which overcomes the issues that have been raised. More specially, the "simultaneous" requirement has been removed from the claims. In connection with claims 62 and 64, it is submitted that the specification discloses that "The inner control loop also includes fluid pressure sensors and position sensors (not shown) arranged at suitable locations within the actuator assembly to monitor the fluid pressure and actuator rod extension/velocity, respectively. The pressure and transfer of fluid by the first control loop is controlled, in response to the measured values provided by the pressure and position sensors ..." see paragraph [0118] of United States Patent Application 20070199315.

Preferably the control system includes (and is responsive to sensing signals from) the first sensor means for sensing the position and/or velocity of the/each actuator rod controlled ..." see paragraph [0065] of United States Patent Application 20070199315.

"A control apparatus (not shown) is also provided to receive the outputs of the pressure and position sensors of the inner and outer control loops and to control the pressurization of the fluid provided by each loop, and the transfer of that fluid around the loops, as desired. Computer control means may be employed to receive and analyze the sensor signals and to generate the appropriate control signals for controlling fluid pressurization and transfer." See paragraph [0122] of United States Patent Application 20070199315.

Accordingly, the pressure in the actuator can be controlled by a control apparatus. The applicable pressure is for example determined according to measured values of position sensor,

said position sensor measuring the actuator rod position. Consequently, it is submitted that the specification provides sufficient antecedent basis for the subject matter of claim 62 and 64.

Claim Status

Claims 34-64 remain pending in the application. Claims 1-33 were previously cancelled.

Rejections under 35 USC § 112

The rejection of claims 34-64 are rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, is respectfully traversed.

Concerning claim 34 and claim 47 the clarifying amendments have been made to these claims. Concerning claim 46 the fluid supply mentioned is the fluid supply referenced as (20) in figure 4. As set forth in the specification: "The actuator system of figure 4 includes a fluid supply collectively denoted 20, which is arranged to be in fluid communication with and to supply pressurized fluid to the hydraulic accumulator 17, the first fluid pump A, the second fluid pump B, and the hydrostatic bearing of the actuator cylinder 6" (see paragraph [0105] of United States Patent Application 20070199315).

Concerning claim 56 the suitable amendments have been made to this claim. Concerning claim 57 as described in paragraph [0105] of United States Patent Application 20070199315, the held fluid is pumped to the extend chamber by a reversible fluid pump of a fluid supply means. Furthermore the extend chamber and the retract chamber are in fluid communication as shown by the figure 3 by the mean of the second reversible fluid pump A.

Concerning claim 62 and 64 see the argument set forth below in connection with the rejection under 35 USC § 102.

Rejections under 35 USC § 102

- 1) The rejection of claims 34-45, 47-57 and 61-64 under 35 USC § 102(b) as being anticipated by Hiraki et al. (hereinafter Hiraki) is respectfully traversed.

Hiraki does not disclose the following feature of the claimed invention: "a fluid supply means arranged to supply fluid to both extend and retract chambers at substantial& the same pressure" (see figure 7 description). To the contrary, the pressure is used in Hiraki to control the

piston displacement. So the features contained in claims 34, 47 and in the other depending claims are not disclosed in Hiraki.

- 2) The rejection of claims 34-38, 47-57 and 61-64 under 35 USC § 102(b) as being anticipated by Nikolaus, is respectfully traversed.

Nikolaus does not disclose the following feature of the claimed invention: "a fluid supply means arranged to supply fluid to both extend and retract chambers at substantially the same pressure" see column 4 lines 43-13). To the contrary, the pressure is different in the extend chamber and in the retract chamber. Therefore, the features set forth in claims 34, 47 and in the other depending claims, are not disclosed in Nikolaus.

Rejections under 35 USC § 103

- 1) The rejection of claim 46 is rejected under 35 U.S.C. § 103 as being unpatentable over Hiraki in view of Nikolaus; and
- 2) The rejection of claims 34 45 and 47-64 under 35 U.S.C. § 103 as being unpatentable over Applicant's admitted prior art in view of Hiraki et al. and MacLeod; are summarily traversed.

Hiraki et al. is cited as disclosing all of the elements of claim 46, as discussed in the above § 102 rejection, however is acknowledged as not disclosing a fluid supply in communication with the accumulator and the second pump.

To overcome this admitted shortcoming, the rejection turns to Nikolaus. However, as noted above, Nikolaus does not disclose "a fluid supply means arranged to supply fluid to both extend and retract chambers at substantially the same pressure." Indeed, the pressure is different in the extend chamber and in the retract chamber.

MacLeod neither discloses nor suggests the feature of the claimed invention which calls for: "a fluid supply means arranged to supply fluid to both extend and retract chambers at substantially the same pressure". Therefore the features recited in claims 34 and 47 and in the other depending claims are neither disclosed in nor suggested by MacLeod.

In fact none of the cited references disclose "a fluid supply means arranged to supply fluid to both extend and retract chambers at substantially the same pressure." Accordingly, it

is submitted that the claimed invention is not rendered obvious to a person of ordinary skill someone skill in the art in view of the cited documents.

The following feature is not disclosed in any of the cited documents: "a fluid supply means arranged to supply fluid to both extend and retract chambers at substantially the same pressure". So we can conclude that the claimed invention is not obvious for someone skill in the art in view of the cited documents.

Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the present application should be in condition for allowance and a Notice to that effect is earnestly solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,
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